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Original.

WHAT IS YELLOW FEVER?

BY T. S. BELL, M. D.

If we wish to learn all that is known of this disease as a disease, we should go to the works of experienced masters. What are the features by which it is distinguishable from all other forms of disease? Every disease of which we know any thing has a distinctive mark by which it is positively known. Diphtheria, scarlet fever, measles, intermittent and remittent and yellow fever, each has some phenomenon by which it is known. There have been occasional examples of human beings who resembled one another so perfectly that a casual observer might confound them, but there were always experts who were able to tell one from the other. This confusion of resemblances has often baffled physicians respecting yellow fever. Experienced persons, skillful physicians, have often mistaken severe remittent fever for yellow fever; others have often taken cases of yellow fever for remittent fever. This can not be wondered at. Intermittent and remittent fevers are due to a daily mean solar temperature of sixty degrees for two months, acting on moist vegetable material; yellow fever is always due to a daily mean solar temperature of seventy-five degrees for something over two months, acting on moist vegetable material. Intermittent and remittent fevers are developed before yellow fever can show itself, because

the temperature that produces them precedes that for yellow fever; and this is universally the case. Intermittents and remittents may continue in some spots after yellow fever has appeared in contiguous localities more favorable for it. I have often been assured that intermittent fevers do not show themselves at New Orleans, when in fact they are found there for fully ten months of the year. It is not unusual for controversies to spring up among the resident faculty of a place visited by yellow fever, whether that disease has appeared or whether the supposed cases are not attacks of remittent fever. There is now but little excuse for this difference of opinion among medical men, since Colling, of Martinique, and Blair, of Surinam and Demarara, wrote their great monographs on yellow fever.

I know of nothing in the history of disease more surprising than the little progress made in understanding the phenomena of any disease than that attending the history of yellow fever. The wonderful sameness of observations for nearly four hundred years is bewildering. I appeal to a single example as illustrative of a large mass of the material that has been contributed on the subject of yellow fever. I presume that no one will call in question the supreme excellence of Prof. Elisha Bartlett as a medical writer and teacher of medicine. He has never been surpassed in these departments of medical science. His great work on the Fevers of the United States rapidly passed through three editions before lead-paralysis prostrated him. A fourth edition of the work was called for while he was thus paralyzed. He requested his friend, Prof. Alonzo Clark, to superintend the fourth edition. In three

editions of the work Professor Bartlett permitted the following statement to appear: "The urine appears to be generally but slightly or not at all changed; at any rate its alterations are accidental and in no way characteristic of the disease." Prof. Clark makes a long and valuable note upon this statement. The condition of the urine is materially changed in every case of yellow fever. It is now recognized as diagnostic of the disease, and is worth every thing else that we know about yellow fever. It is an infallible pathognomonic sign of yellow fever, and the physician who attends a case of the disease, or a supposed case of it, without making himself intimate, thoroughly intimate, with the state of the urine *at each visit* is unfit to attend upon the case. That intimate knowledge will give him a mastery over the case that nothing else can supply.

In the early stage of yellow fever the matters thrown from the stomach are alkaline. There may be only a single ejection, and the stomach may remain perfectly tranquil two or three or four days. The matter thus thrown off is a *white fluid*. If albumen appears in the urine the first day of the disease, the patient never throws *this white fluid* from the stomach. It is albuminous. This of itself shows the momentous importance of an intimate knowledge of this entire field of pathology. The microscope is a *sine qua non*.

Take it all in all, yellow fever is one of the most remarkable of all the diseases that assail the human family. It is one of the most variable in its signs that is known. Arejula, the great Spanish physician, says, "Cases occur in which physicians of experience and practical tact have thought patients free from all danger when almost immediate death refuted the prognosis; and others, in which the symptoms were of the gravest character, and justified the gloomiest prognosis, would struggle into health."

Ashabel Smith, of Galveston, Texas, an expert in yellow fever, says: "From the frequency of the pulse, appearance of the tongue, temperature of the surface, clear-

ness of intellectual faculties, a favorable prognosis should be formed with extreme caution, as these frequently do not vary from the standard of health in cases of extreme danger." Now, had Arejula and Ashabel Smith known any thing of the momentous character of the renal condition in yellow fever, they would have been armed against this uncertainty, and would have had an infallible guide to prognosis. The great Bally says: "There is no other acute disease in which the intellectual faculties remain as clear as in this disease;" but precisely the same state of things exists in malignant intermittent fever and in cholera. I have seen the mind clear and vigorous to the last moment of life.

Of this state of things permit me to give two examples: "The master of the ship Hindu was visited by Dr. Blair. He found him dying, but he sat up in his bed, drank beverages, and joked with the shipmasters around him up to the moment of death."

Dr. Blair, within a few hours of death in the case, found "the carpenter of the Elenor, pulseless, sitting in his chair, enjoying his pipe as though in perfect health."

But let us look at a portrait of the disease drawn by a master intimately acquainted with it—Robert Lawson, Inspector-general of Hospitals. I am indebted to my friend, Dr. Willoughby Walling, for the use of his European London Lancet, of July 20th, containing a paper by Dr. Lawson on this subject. He wrestled with the disease in its indigenous localities on the western coast of Africa and in the West Indies. He says: "Yellow fever is a febrile disease, usually terminating in convalescence or death from the fourth to the seventh day, but either may occur as early as the second day, or not before the tenth or twelfth, or even later. There is generally yellowness of the surface, commencing at various periods in different individuals or epidemics. On the evening of the third day, or morning of the fourth, the urine usually contains traces of albumen, and on the latter a considerable sediment appears in it, almost wholly con-

sisting of the scaly epithelium of the bladder. This is succeeded by an equally copious one on the morning of the fifth day, which consists almost exclusively of granular tube-casts from the kidneys, with scarce a trace of epithelium from the bladder. By this time the albumen has usually become considerable, the chlorides have been greatly reduced, and the urine as a whole is usually scanty, and may even go on to complete suppression. If there be much yellowness, the urine may contain a variable quantity of the coloring-matter of the bile. The alvine discharges are devoid of the natural feculent appearance, especially from the third day onward, until the disease gives way." (Dr. Blair calls these discharges "caddy-stools," from a mud of that name at Demarara.) The alvine discharges contain triple phosphates, showing the utter perversions of excretions in this disease. "As the alvine and urinary secretions assume these peculiarities, there is a great tendency to black vomit or discharges of similar matter from the bowels, or to the so-called hemorrhages from the various mucous surfaces, or even in some cases from the skin; and after death such may often be found in the stomach or intestines when not manifested during life. Such are the distinctive features of a normal case of yellow fever, but in some the occurrence of the urinary symptoms may take place earlier than here mentioned, and in others they seem to be delayed for a day or two; but whenever watched from day to day, and properly examined, it is found that the changes in the urine not only embrace the albumen, but indicate desquamation of the bladder and kidneys as *regular features of the disease*. It is important to bear this in mind, for in some varieties of intermittent albumen has been found in the urine; but in such cases it occurred only during the cold stage, and went off as the fever came on, and was not preceded or accompanied by the desquamative process present in yellow fever, but which is not met with in either the pure intermittent or remittent."

The italics in this extract are mine. That

which I wish to impress upon the mind of every body is that in the hours when the disease is amenable to treatment this special disease can be told only by the microscope and the best tests for albumen. It may be remittent fever or yellow fever; it is vital to the welfare of the patient to distinguish them, and that can be done in no other way than by the masterful use of the microscope. A physician who has not that mastery of the microscope, and who does not make it give him a full revelation, is no more prepared to attend a case of yellow fever than he is to fly. These are the doctrines that I have taught to every medical class for the past twenty-two years. Dr. Blair very truly says, "As long as urine passes, though as black as ink, there is hope for the patient; he may struggle into convalescence."

Dr. Lawson gives some instructive facts on the cause of yellow fever, which I shall attend to in my next paper on the subject. And now, I ask, what do these indubitable truths, as expressed by Dr. Lawson, teach us? In intermittent fever, and in remittent, the urine is sometimes totally suppressed. Death is inevitable in every case of the kind. This is the distinguishing sign of cholera. In every case of yellow fever great changes are invariably impressed upon the renal organs. In all "walking cases" the total suppression is coincident with the first sign of the disease, and no one ever recovers from that. There is but one cause of disease known to medical philosophy that produces these changes in the renal organs. It must be self-evident that thousands of cases of remittent fever of a grave character are called yellow fever when the microscope, and only its use, would show the true character of the disease.

Dr. Ormerod, of Bartholomew's Hospital, very forcibly and pertinently says: "Another point in toxicology, which may aid us in the investigation of the pathology and therapeutics of fevers, is that poisons have a specific determination to some organ in especial as well as a general influence." Now here is a class of fevers of a peculiar character—in

tertian, remittent, and yellow fevers—prevailing in a tropical climate, in the same locality, and the poison from which they spring invariably displays itself upon the renal organs. There is no case of either of the diseases without these phenomena, and the signs belonging to each must be known. Intermittent fever is occasionally fatal in the first paroxysm, sometimes in the third, and the fatal issue is due to this overwhelming action on the renal organs. The remittent fever is sometimes as fatal as yellow fever. The malignant remittent at Edam, as described by Dr. Shields, whose report is in Dr. James Johnson's "Diseases of Tropical Climates," was as fatal as yellow fever could have been, yet it was perfectly distinct from yellow fever. Dr. Shields says that every person who slept on shore died. Intermittent fever sometimes has the black vomit; that was a common symptom in the remittent fever at Edam. It is a prevalent sign in yellow fever. How are these notorious truths to be accounted for? How is the veil to be lifted, except as a revelation of a community of origin? Every case of intermittent, every case of remittent fever that has occurred among men, came from one cause; and as malignant remittent fever is always due to the concentrated character of the poison in a climate approaching that which produces yellow fever, we are at no loss to account for the fact that the high persistent solar temperature that invariably accompanies yellow fever, produces qualities in the poison that inflicts the perilous changes in the renal organs as characteristic of yellow fever, as the eruption of scarlet fever is characteristic of that disease. Intermittent, remittent, and yellow fevers never attack any who are not exposed to their cause; neither of them ever arise from any amount of exposure in daytime; they all begin their attacks at night, with great uniformity. These facts, for facts they are, point to a species of unification as the cause.

Another feature common to all these forms of disease is the latency of the cause. Per-

sons may leave a locality of intermittent, remittent, or yellow fever, travel for weeks in a region where such diseases are never produced, and then be attacked with precisely that form of disease to which the indigenous locality gave origin. And the peculiarity of this law of latency is that no matter what may be the character of the disease produced in the locality where the poison was acquired, it will develop precisely that form of disease, no matter how great may be the lapse of time. These are great truths, common to intermittent, remittent, and yellow fevers, that are not nearly so well known and understood as they should be. They infallibly point to one momentous truth which I have known tested in many hundreds of cases with invariable success. If all the persons who leave such a locality immediately begin the use of salts of Peruvian bark, and take it until cinchonized, neither intermittent, remittent, or yellow fever can show themselves until a new supply of poison is acquired. Upon this truth the British government has changed the health-rate of the British navy. For a long period of time the death-rate was one in every eight of the seamen. The death-rate now is one in seventy-two. This change has been produced by two standing orders of the Admiralty. One order prohibits the sleeping on shore at night in any tropical climate; the other requires that as the ship approaches a tropical latitude every person on board shall daily take a dose of quinine. In this way the British Admiralty has disarmed the West Indian and West African coasts of the terrors of their former death-dealing poison. Should we be indifferent to such impressive truths as these?

In the middle ages the doctors fired at the planets as the cause of the deviltries of epidemics. In this nineteenth century medical minds affect disinfectants. Of the existence of any thing of the kind they know nothing. In Memphis and New Orleans carbolic acid, chlorine, coal gas, and fumigations of tar and sulphur were tried and wasted in large quantities. Dr. Jerome Cochrane, Professor

of Public Hygiene and Medical Jurisprudence in the Alabama University, took hold of the subject with the mind of a philosopher. He says: "The City Hospital at Mobile has been more thoroughly 'disinfected' than any other part of the city; the whole atmosphere in its vicinity was saturated with carbolic acid for weeks, yet the protective virtues of 'disinfection' have not only failed to check the progress of yellow fever in the hospital and vicinity, but have failed to modify its type, while in other parts of Mobile, where disinfectants were not used, there was no yellow fever. In 1871 Dr. Albers was the champion fumigator of New Orleans, using all the resources of carbolic acid and fumigation in the fourth district of New Orleans; yet in a diameter of fourteen hundred feet there were fifty-four deaths in one hundred and fourteen cases. In 1872, in that same district, carbolic acid and fumigation were used pertinaciously, but eighty-three cases of yellow fever occurred there, and continued to occur until frost stopped the action of the cause." Dr. Cochrane says: "The experiment has been made and it failed; and it is due to the cause of truth and sanitary science and to the interests of the public health here that no false and misleading estimate of what it has accomplished shall be allowed to fasten itself on the public mind." And now, in 1878, the Surgeon-General of the United States is requested to become a fumigator of all mail-matter from infected districts. Here in Louisville we receive mails, letters, and papers from New Orleans, Memphis, and Grenada, and handle them as safely as we ever handled them. We meet daily those who have come from the focus of the pestilence, and we entertain no more fear of catching disease from them than we have of catching the features of their countenance to the confusion of personal identity. The great disinfectant of yellow fever is frost, that has often ended its ravages as soon as it appeared.

When may we hope for that blissful time when medical men shall learn that their

science consists of facts, and not of theories? When may we hope that they shall not guess their way in any thing, but act upon positive convictions, based on absolute knowledge? They have no excuse for mistaking a case of yellow fever. The microscope is an infallible guide to positive knowledge on this subject, and there are no other means known for this but those provided by that instrument. Black vomit is attendant on intermittent and remittent fever; yellowness of the skin may invade both; there may be the so-called hemorrhages in both, yet these are often considered and accepted as signs of yellow fever.

I owe my medical brethren one more article on this subject, which I shall endeavor to give them next week.

LOUISVILLE.

Correspondence.

SALICYLIC-ACID SNUFF IN HAY-COLD.

To the Editors of the Louisville Medical News:

It won't do to swallow or snuff up every thing one sees in print. Even so veracious a journal as the LOUISVILLE MEDICAL NEWS may lead into error. Last week you published among the selections an extract from the British Medical Journal in which was related the experience of "W. J. H. Wood" with salicylic acid in hay-fever. He used the acid as a snuff, given pure, to the amount of "ten or fifteen grains daily." I innocently gave the prescription to a patient, who, after trying it, asked if it was not a "little strong." Whereupon, having said "Oh, no," I illustrated my faith with works, and took a pinch myself. Shades of Macaboy, of Rapee, of cayenne pepper, of all mixed! Faint and puny outlines are ye of the "salicylic acid pure." Was my faith shaken? Yes, my friend, and the very foundations of the house in which I stood, by the sneeze which followed the snuffing of that innocent-looking powder. I said I thought *it was* a little strong, and would have it diluted. And now a most curious sequel: I took that powder to a drug-

store (there were about forty grains of it), and had successively stirred into it a drachm of bismuth, half an ounce of powdered gum arabic, a lot of borax, and a handful or so of powdered slippery elm, and at no stage of the proceeding was there any compound which could be snuffed without fear of sneezing one's eye-balls loose. Indeed I might say, as the result of no little anxious experimentation, that the snuffing of all ordinary and many of the extraordinary dilutions of salicylic acid is far worse than the majority of hay-colds. "W. J. H. Wood's" patient (he had one who liked the acid) was evidently copper-lined.

Yours, "NO-MORE-IN-MINE."

P. S. You will be glad to learn that the drug-clerk, upon whom most of my later experiments were conducted, is recovering, though slowly.

LETTER FROM LONDON.

To the Editors of the Louisville Medical News:

I take the liberty to forward a copy of some more notes in hopes that they may not prove uninteresting.

Radical cure of Varicocele.—University Hospital. By Mr. Marshall. Patient aged twenty-eight. Eleven months since he felt uneasiness about the left testicle and noticed that the veins were enlarged. It grew worse, accompanied by drawing-down pains in the groin, and rapid increase in the size of the veins; had cold water dressings, followed afterward by a suspensory bandage, which he wore when he entered the hospital. The veins were then obliterated by passing two stout ligatures, an inch apart, through the upper portion of the scrotum, around the plexus of veins, and bringing them out at their points of perforation and tying them tightly. The veins were then divided between the ligatures subcutaneously and the parts dressed with carbolized oil gauze and oakum. From the third to the eleventh day, on moving, he had slight attacks of pain, with some swelling in the groin and occluded portion of veins, which afterward

disappeared, the ligatures coming away on the thirteenth and fourteenth days. On the fifteenth day he was walking about the wards completely free from the varicocele, and left the hospital five days afterward.

Radical cure of Hydrocele.—King's College Hospital. By Mr. Smith. Patient aged forty-two; had a large hydrocele which had been tapped three times and had refilled as often. The treatment began by drawing off the fluid with the trocar and canula, pressing gently the scrotum, so that as little fluid as possible might be left in; then through the canula four drachms of the iodine solution (iodine 1 part, water 2 parts) was injected, the parts still being manipulated that the iodine might thoroughly come in contact with the whole inside surface. During the injection there was slight burning pain in the groin, which lasted for about three hours, and the next day the scrotum was slightly swollen, but soon disappeared. The man left the hospital on the fifth day feeling perfectly well. In the remarks preference was given the iodine because it did not produce the disagreeable effects that sometimes follow the use of the seton.

Colotomy.—Guy's Hospital. By Mr. Bryant. Male, aged twenty-five years; had syphilitic stricture of rectum. The operation was by the left loin method. The colon was hooked out with the finger, well exposed, and two stout sutures passed through it and the skin near the incision. It was then opened between the sutures, the loops pulled out, divided, and the gut tied to the surface at four different points. Then on either side of the sutures a triangular one was inserted that passed through the sides of the intestine, holding them well toward the angles of the wound. The carbolized oil dressing was used; the diet milk and beef-tea. On the fifth and seventh days the sutures were removed, and motions passed through the fistula on the ninth; they afterward became regular, giving no pain, except when the feces passed into the rectum.

Gastrotomy.—Guy's Hospital. By Mr. Howse. Female, aged thirty-seven; had

cancerous stricture of œsophagus; had experienced difficulty in deglutition for three months; much flesh lost; swallowing difficult and quite painful. The growth being very slow, it was decided to perform gastro-tomy. The operation began by making the usual incision two and a half inches long, parallel to the *linia alba* on the left side, exposing the cardiac end of the stomach, which was pulled out in the wound, and by three sutures on the inside and four on the outside, passing through the serous and muscular coats of the stomach, tied it to the fresh edges of the incision; between each of these a thinner suture passed through the same coats, and stitched it to the skin of the incision. All this was done under the spray and dressed antiseptically. On the fifth day adhesions had formed between the stomach and approximate walls, when it was opened and food introduced.

Orthopaedic.—Royal Orthopaedic Hospital. *Talipes equinus* is treated by division of the tendo-achillis, the foot then dressed without extension until puncture is healed. On or about the fourth day, when extension begins, and is made gradual and continued by the use of a suitable shoe until it is complete, in about six weeks. If the plantar fascia is then found contracted it is divided and the foot extended to the desired position.

Talipes Varus.—In congenital varus the treatment is wanted to begin within some few weeks of birth, as less time is then required to produce an equally successful result. In some very slight cases the deformity is cured by bandaging with manipulations, but generally the tendons are divided, and after their fibrous union the foot is everted by gradual extension into the equinus, and then treated as in that deformity.

Curvatures of the Spine.—In posterior curves Dr. Sayre's plaster jacket is used and liked very much. For lateral and other curvatures the instrumental apparatuses are still preferred at this hospital, though in others the jacket is used exclusively.

Yours obediently,

D. A. COYLE, M. D.

Miscellany.

THE METRIC SYSTEM FOR PHYSICIANS.—Francis H. Brown, M. D., in the Medical Register for New England:

To understand the metric system thoroughly, and to use it intelligently, a person should *forget* the units of length, volume, and weight to which he has been accustomed, and should at once and definitely familiarize his senses with the new measures, as they are brought into daily use, irrespective of the old system. It is simply an arbitrary rule which makes a grain of opium a medium dose for an adult; it may be a maximum dose for one and a minimum for another. To supply a practical guide to physicians, a list of the minimum and maximum doses of the more common drugs, very nearly equaling the doses usually employed, is given. For those who wish to convert the value of doses in the old system to the new, the following facts and table are given.

The metric system was first suggested by French scientists, about the year 1790, with a view of making all measures of length, volume, and weight uniform throughout the world. It comprises the following units of measure:

The *meter*, the unit of length—the ten-millionth part of the terrestrial meridian, or the distance between the pole and the equator=39.370432 inches.

The *liter*, the unit of capacity—a cube of the tenth part of a meter=1.0567454 wine-quart.

The *gram*, the unit of weight—the weight of a cubic centimeter of water at its maximum density (4° Cent.)=15.43234874 grains. In medicine the *gram* is the unit of weight, and the *cubic centimeter*, or a measure of one gram of water, is the unit of volume; practically the two terms are equivalent, except with very heavy or very light liquids.

$\frac{5}{3}$ i (Troy)=480 grains=31 103 grams, about 32	
$\frac{3}{2}$ i = 60 grains= 3 888 grams, about 4	
1 grain = .0648 gram, about .06	
$\frac{1}{2}$ grain = .016 gram, .016	
$\frac{1}{4}$ grain = .008 gram, .008	

The average (household) teaspoon holds five and the tablespoon twenty cubic centimeters.

The following prescription illustrates the method of using the system, and the facility of dividing the dose in proportion to the age of the patient, the first column representing the dose for an adult. The decimal line instead of *points* makes errors impossible.

	(1)	($\frac{1}{2}$)	($\frac{1}{4}$)	($\frac{1}{8}$)	($\frac{1}{16}$)		Minimum.	Maximum.
K Potassii acetatis.....	8	4	2	1	60	1	80	
Spiritus etheris nitrosi.....	16	8	4	3	20	2	60	
Syrupi scille.....	4	2	1	1	80	50	40	
Aqua menthae piperitæ.....	100	100	100	100	100	100		
Misce.								
Acidum arseniosum.....		005		008				
carbolicum.....		05		20				
gallicum.....		20		100				
hydrocyanicum dil.....		10		30				
muriaticum dil.....		10		100				
nitricum dil.....		25		100				
phosphoricum dil.....		50		400				
salicylicum.....		25		100				
sulphuricum aromaticum.....		50		200				
tannicum.....		10		100				
Aconiti extractum.....		03		06				
radicis tinctura.....		25		100				
Ætheris, spiritus comp.....	2.00		4.00					
nitrosi	2.00		4.00					
Aloe socotrina.....		10		50				
Aloes et myrrhae tinctura.....	4.00		8.00					
Ammoniæ aqua.....		50		100				
acetatis liquor.....		8.00		30.00				
spiritus aromaticus.....		1.00		4.00				
Ammonii, bromidum.....		25		100				
carbonas.....		25		100				
chloridum.....		50		200				
valerianas.....		25		50				
Amyl nitris.....		10		30				
Antimonii vinum.....		50		400				
et potassii tartras.....		002		10				
Argenti nitras.....		015		15				
Assafetida.....		25		100				
Assafetida tinctura.....		25		200				
Belladonnae folia.....		05		15				
extractum.....		015		6				
tinctura.....		25		125				
Bismuthi subnitras.....		25		100				
Buchi extractum fluidum.....	2.00		8.00					
Camphora		10		50				
Camphoræ aqua.....		15.00		30.00				
Cannabis indicæ extractum.....		015		6				
tinctura		25		100				
Cantharidis tinctura.....		25		100				
Capsicum		06		30				
Capsici tinctura.....		50		125				
Catechu tinctura.....		2.00		8.00				
Cerii oxalas.....		06		30				
Chloral.....		25		125				
Chloroformum.....		25		200				
Cinchone tinctura composita.....	4.00		8.00					
quinia (salts of).....		05		125				
cinchonia (salts of)...		05		125				
cinchonidia (salts of)...		05		125				
Colchici tinctura		25		125				
radicis vinum		50		200				
seminis		2.00		4.00				
Colocynthidis extractum comp....		25		200				
Conii extractum.....		10		25				
tinctura		2.00		4.00				
Copaiba		1.00		4.00				
Creasotum		05		25				
Croton chloral		05		50				
Cupri sulphas.....		015		30				
Digitalis.....		05		10				
extractum		03		12				
tinctura		50		200				
Elaterium.....		008		10				
Ergotæ extractum fluidum.....		50		400				
Fel bovinæ purificatum		20		50				
Misc.								
Ferri carbonas saccharatum		25		200				
citras.....		25		60				
iodidi syrupus		50		400				
pyrophosphas		10		30				
subcarbonas		25		200				
sulphas.....		05		30				
chloridi tinctura		50		200				
Ferrum redactum		06		30				
Filicis oleoresina.....		50		200				
Gelsemini tinctura.....		05		150				
Guaiaci tinctura.....		2.00		400				
ammoniata		2.00		400				
Guarana		50		200				
Hydrargyri chloridum mite		03		100				
Hydrargyri chloridum corrosivum		005		015				
iodidum rubrum		004		015				
pil. pulvis.....		05		100				
sulphas flava		015		30				
Hydrargyrum cum creta.....		10		50				
Hyoscyami extractum.....		10		25				
tinctura		50		200				
Iodinii tinctura		25		100				
composita		25		100				
Ipecacuanha		03		200				
Ipecacuanhae vinum		25		3000				
Jaborandi		2.00		400				
Jalapa.....		50		200				
Jalapa tinctura		2.00		800				
Juglandis extractum		1.00		200				
Kooso		10.20		2000				
Kamala		4.00		800				
Magnesii carbonas.....		50		200				
sulphas.....		15.00		3000				
Nucis vomice extractum.....		03		10				
tinctura		50		200				
strychnia (salts of)		001		005				
Oleum morrhua		4.00		1500				
ricini		4.00		3000				
terebinthina		50		3000				
Oleum tiglii		03		10				
Opium		03		10				
Opii acetum.....		25		60				
elixir (McMunn)		25		125				
extractum		03		60				
tinctura		50		200				
camphorata		50		400				
deodorata		50		200				
vinum		50		200				
morphia (salts of)		008		03				
liquor morph. sulph. (Mag.)		25		100				
pulvis ipecac. comp.....		25		100				
Pepsina.....		25		100				
Phosphorus		001		002				
Plumbi acetas		10		30				
Podophyllum		50		125				
Potassii acetas		50		400				
arsenitis liquor		10		50				
bromidum		50		400				
chloras		50		200				
iodidum		10		50				
nitras		25		125				
et sodii tartras		8.00		3000				
Rheum		1.00		200				
Rhei tinctura		2.00		3000				
Salicinaum		50		100				
Santoninum		03		12				
Scille acetum		1.25		400				
tinctura		50		200				
Sennæ extractum fluidum		4.00		1500				
Sodii carbonas		50		200				

	Minimum.	Maximum.
Sodii hyposulphis.....	50	125
Spigelia extractum fluidum.....	400	800
Stramonii folia.....	10	20
semen	06	12
tinctura.....	50	125
Uvae ursi extractum fluidum.....	200	800
Valerianae extractum fluidum.....	200	800
Veratri viridis, tinctura.....	25	50
Zinci phosphidum.....	005	01
sulphas.....	015	200
valerianas.....	05	30

ABSTRACT OF SANITARY REPORTS RECEIVED
DURING THE PAST WEEK UNDER THE NA-
TIONAL QUARANTINE ACT:

OFFICE SURGEON-GENERAL, U. S. M. H. S., }
WASHINGTON, August 17, 1878. }

New Orleans. Since last report four hundred and seventy-one cases of *yellow fever* and one hundred and twenty-one deaths, making a total of nine hundred and two cases and two hundred and thirty-nine deaths, of which one hundred and eight cases and twenty-nine deaths occurred during the twenty-four hours to noon yesterday.

Port Eads. Thirty-three cases of *yellow fever* and five deaths during the week to yesterday evening.

Grenada, Miss. The first case of *yellow fever* occurred July 25th. To noon yesterday there had been one hundred and twenty-five cases and forty-seven deaths.

Mobile. One death from *yellow fever* yesterday—a colored woman who, it is reported, had been on an excursion to Biloxi, Miss., July 24th.

Cincinnati. Since the last report a young woman, living in a house where baggage believed to be from New Orleans was stored, died of a fever resembling *yellow fever*. Another case of fever of similar character has since developed in the same neighborhood. Steamer John A. Porter, from New Orleans, had four deaths from *yellow fever* before arriving at Cincinnati, which city she passed on Friday, bound for Pittsburgh, with several cases on board. One man, who left the John A. Porter at Louisville, proceeded to Cincinnati by rail, where he was sent to hospital on the 13th inst. with *fever*.

The steamer Golden Rule passed Cairo yesterday evening for Cincinnati with two cases of *yellow fever* on board. Two deaths occurred on board that vessel Thursday.

Several people from New Orleans and Port Eads have sickened or died of *yellow fever* on their journey northward; one case at Covington, Ky., one at Cairo, and three deaths at St. Louis.

Memphis. The first case of *yellow fever* occurred August 13th, in the person of a woman whose eating-house was frequented by river-boatmen. The disease has spread rapidly, but has not yet assumed a malignant type.

Vicksburg. *Yellow fever* has appeared since last report. The first death occurred August 12th. Advices to noon to-day report the outbreak of the disease near the river-front within the last fifteen hours, from whence it is spreading rapidly.

Havana. Ninety-nine deaths from *yellow fever* and nine from *small-pox* during week ended August 10th.

Cardenas and Sagua la Grande, Cuba. No cases of *yellow fever* during the week ended August 9th.

Matanzas. Decrease in *yellow fever* for week ended August 9th.

Calcutta. Ten deaths from *cholera* for week ended June 15th.

Bombay. Twenty-five deaths from *cholera* for week ended June 25th.

Reports received from other places indicate good health. JOHN M. WOODWORTH,
Surgeon-general U. S. Marine Hospital Service.

"WHITHER AWAY."—London Med. Examiner: There is a great deal of hysteria and a great deal of cant about the modern craze for "going away." Not one quarter of the people who insist so strongly on the absolute necessity of their having an annual holiday trip really stand in physical need of the same. It is only a very small proportion of the community whose conditions of life are so abnormal and unhealthy that the uninterrupted continuance of them is inconsistent with the maintenance of undiminished

mental and physical vigor. The rest of the community would be, we do not say absolutely the better, but certainly not very much the worse, if they never slept away from the place where their daily occupation lies. They have got it into their heads, however, that an annual holiday is as much a necessity for them as a daily sleep, and we doctors have to stand by, the helpless abettors of a physiological fallacy. It is true that in a great number of cases the fallacy has been so burnt into the fibers of mental consciousness by the mordant-like action of hysteria that it is impossible either to remove it or to reckon without it. In hypochondriacal constitutions the belief in the necessity of a periodical change in itself renders such change a necessity. The nervous lady who takes it into her head that an autumn trip to the seaside is required by her health, places herself by that assumption in the very condition to require such a change. But there are many cases in which the necessity of a holiday is put forward on even less substantial grounds than this. That the young city clerk or civil servant, who works about as hard as an emancipated negro, lives down the river, and spends his abundant hours of leisure in invigorating exercise, should put forward his want of health as a plea for still less work and still more leisure is an utter absurdity. Let him confess that his allotted hours of leisure and pleasure, numerous as they are, are not commensurate with his ideas of propriety, that Richmond and Surbiton, beautiful as they are, are not so much to his taste as the Rhine and the Alps, and we shall be willing to entertain his plea. But for a man in perfect health to put forward the requirements of his constitution as an excuse for the gratification of his love of pleasure is nothing short of cant and humbug. And yet we are only too often asked to abet such humbug and to give certificates of ill-health to men whose only deviation from the normal is a deficiency of physical vigor in the face of dis-tasteful work.

But let us leave our patients and think of

ourselves. We doctors are, perhaps, not altogether free from the hysteria and cant we have spoken of; but on the whole we think there are no men, except perhaps the stokers on the underground railway, whose conditions of life make an annual holiday so real a necessity as is the case with the doctors. Apart from the hard mental and physical work and wear demanded of the medical practitioner, his constant contact with the sick tends—in much the same way as environment influences the physical characters of animals—to approximate him to their condition. Where the doctor's other surroundings are such as counteract this tendency—where, for instance, his visits are sandwiched between long country drives—there is little need of change either of air or scene. We have known country doctors who had worked in the same village summer and winter for thirty years without any greater holiday than an occasional day with the hounds. This type, we fear, is dying out, partly perhaps from the excessive education demanded now of the medical student; but scattered throughout country towns and villages there is many a doctor still who feels neither the wish nor the need for change, who, fortunately for him, has not imbibed the modern craving for excitement, and the happiness of whose life would be gone were its monotony broken. But, alas, we can not be all like these. We have, most of us, as the Germans would say, smelt the blue flower, and for us there is no longer any possibility of resting contented in the unbroken round of our daily toil, even did our health permit.

Hence for us at this season of the year the question "Whither away?" has the same importance that it has for west-end ladies tired of too much pleasure and city clerks tired of too little work. It is not an easy question to answer even for oneself, and it is utterly impossible to answer it for other people. The requirements of the problem are so different in different cases. One man has children and likes the dismal quiet of Herne Bay; another is a bachelor and pre-

fers a journey to the uttermost parts of the earth. One man loves solitude and the pebbled staircase of Clovelly; another is fond of society and Scarborough hotels. Then there are physical requirements to be taken into consideration. This man wants a stimulant atmosphere, that man a sedative one. This man has a leaning toward gout, and finds Homburg suit him; that man is shaky as to his mucous membranes, and prefers Pyrenees. Then, again, we have to take into account combinations of physical and mental requirements. Dr. A. likes Switzerland and society, and so pitches his tent at Mürren. Dr. B. likes Switzerland and solitude, and haunts year after year some unfrequented hostel. Nor does that important factor in family history—the purse—fail of its influence in fixing the abode of rest.

Difficult, however, as the problem often is, and numerous as are the separate indications which may have to be considered in fixing upon a holiday-resort, there is a very surprising monotony in the results. Most people have so much greater resemblance to screws than to gimlets. They are ready enough to follow where a path has once been opened, but they are utterly powerless to open a path for themselves. Here, as in other matters, we have to lament that great defect in the constitution of the human animal, the grievous want of originality. How is it that the few favored holiday resorts are so very crowded, while numbers of equally charming places are utterly neglected? How is it that for the thousands that go to Switzerland there are tens only that go to the Black Forest, units that visit the Vosges, while the proportion of English tourists who seek the lovely valleys of the Thuringian Forest must be expressed in decimals? How is it that some of the most lovely country scenery in England is neglected, and men may be found who beat Baedeker in Swiss geography, but who have never heard of the vales of Pewsey and Catmos? How is it that the only inland parts of England which are patronized by visitors are those which are remarkable for an ex-

ceptionally impure water-supply? To this series of questions the only answer is, that we all carry our duty to our parents to a ridiculous extent, and imitate not only their virtues but their follies. A little disrespect to their memory, at least to the extent of neglecting to imitate them in the matter of holiday trips, would be much to the purpose. A special duty falls on doctors in this respect, for they have to choose holiday resorts, not only for themselves, but for their patients. By making of himself the "vile body" on whom to conduct the experiment, the doctor may in the course of his life add many a new feature to the tourist's guide, providing first his patients, and in their wake the general public, with fresh possibilities in deciding on that delightful but perplexing question, "Whither away?"

THE Louisville City Hospital was bad enough under the old regime. With commissioners supposed to be devoted to the interests of one of the schools, it could not at least be regarded with great favor by the others. Still these then had some sort of a chance. Last spring there was a new deal and a new board fearfully bent upon reform. To be above reproach in school matters, it dispensed alike injustice to all. The head of every school-man which could be loosened tumbled, and a by-law was framed excluding such from the elective hospital staff. The places were then filled by disappointed aspirants for school honors or educational failures, and other great reforms were instituted too numerous to note just here.

What a lovely change has taken place! During the past five months, since the new government was instituted, there has not been a week without its row in the institution, and its affairs are daily dragged before the public in the newspaper press. From the commissioners who, disfiguratively speaking, pull each other's wigs to the scullions who shy poultices at each other, the hospital is in a ferment. Superintendent, graduates, nurses, firemen, and medical staff swell the nasty chorus.

Well—we chronicle the matter as a piece of news, but take no further interest in it. Piously, we address ourselves to the Good Friday collect, which prays for the conversion of "Jews, Turks, Infidels," and lunatics, and calmly await the issue of the fight.

Selections.

Remarks on the Form and Contagiousness of Yellow Fever.—Robert Lawson, Inspector-general of Hospitals, in London Lancet:

There is nothing more striking in the modern literature of yellow fever than the little advance it displays on the line of investigation and the mode of treatment followed by the numerous writers who recorded their experience and views at the beginning of the century. Now, as then, one body of medical practitioners regard yellow fever as presenting various forms, as arising from local causes and not from personal contagion, and as frequently appearing sporadically as well as from time to time in the form of a severe epidemic. Another body considers that yellow fever always arises from a poison given off by a person already laboring under it, as being a continued fever and never presenting a remitting or intermitting form, and as never appearing sporadically, or arising without communication either directly or mediately with a previous case; while they relegate the sporadic cases every West Indian and many an American practitioner are familiar with, and the frequent occurrence of which can not be ignored, to what has been variously designated "remittent" or "malarious yellow fever"—a form said to present a very close resemblance to true yellow fever, including the yellowness of the surface and black vomit, but which may be distinguished from yellow fever by the non-occurrence of albumen in the urine. It is worthy of observation that the great majority of the members of the profession who have resided some years in the tropics, and had constant experience of yellow fever, entertain the first opinion, and it is only among those who have met the disease occasionally, or who have never been brought into contact with it, that the second is generally received.

Yellow fever is a febrile disease, usually terminating in convalescence or death from the fourth to the seventh day, but either may occur as early as the second day, or not before the tenth or twelfth, or even later. There is generally yellowness of the surface, commencing at various periods in different individuals or epidemics. Upon the evening of the third day, or morning of the fourth, the urine usually contains traces of albumen, and on the latter a considerable sediment appears in it, almost wholly

consisting of the scaly epithelium from the bladder; this is succeeded by an equally copious one on the morning of the fifth day, which consists almost exclusively of granular tube-casts from the kidneys, with scarce a trace of epithelium from the bladder. By this time the albumen has usually become considerable, the chlorides have been greatly reduced, and the urine as a whole is usually scanty, and may even go on to complete suppression. If there be much yellowness, the urine may contain a variable quantity of the coloring matter of the bile. The alvine discharges are devoid of the natural feculent appearance, especially from the third day onward till the disease gives way. As the alvine and urinary secretions assume these peculiarities, there is a great tendency to black vomit or discharges of similar matter from the bowels, or to the so-called hemorrhages from the various mucous surfaces, or even in some cases from the skin; and after death such may often be found in the stomach or intestines when not manifested during life. Such are the distinctive features of a normal case of yellow fever, but in some the occurrence of the urinary symptoms may take place earlier than here mentioned, and in others they seem to be delayed for a day or two; but whenever watched from day to day, and properly examined, it is found that the changes in the urine not only embrace the presence of albumen, but indicate desquamation of the bladder and kidneys as regular features of the disease. It is important to bear this in mind, for in some varieties of intermittent albumen has been found in the urine; but in such cases it occurred during the cold stage only, and went off as the fever came on, and was not preceded or accompanied by the desquamative process present in yellow fever, but which is not met with in either the pure intermittent or remittent.

1. Yellow fever is not a disease always presenting the continued form, but it is met with frequently as a remittent, and even as an open intermittent.

2. The sporadic cases presenting yellowness of surface and black vomit are also found to have the train of urinary symptoms characterizing yellow fever, and are consequently identical with those met with during an epidemic.

3. In very many instances where persons in the vicinity of yellow-fever cases are attacked with the disease, the facts do not admit of the exclusion of local causes, and such instances therefore can not enable us to decide whether these causes or personal contagion have originated the disease; but from time to time other instances occur in which the exclusion of local causes can be assured, and in these, however extensive the exposure of susceptible individuals to the emanations from the sick may have been, the uniform result is that no communication of the disease has taken place.